



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,365	01/31/2005	Jan Kall	59643.00559	8234

32294 7590 07/25/2006

SQUIRE, SANDERS & DEMPSEY L.L.P.  
14TH FLOOR  
8000 TOWERS CRESCENT  
TYSONS CORNER, VA 22182

EXAMINER

LY, NGHI H

ART UNIT PAPER NUMBER

2617

DATE MAILED: 07/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/518,365

Applicant(s)

KALL ET AL.

Examiner

Nghi H. Ly

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 18-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 2617

The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.

## DETAILED ACTION

### *Response to Arguments*

1. a. Applicant's arguments filed 04/19/06 have been fully considered but they are not persuasive.

b. Applicant's arguments with respect to claims 18-34 have been considered but are moot in view of the new ground(s) of rejection.

On pages 8 and 9 of Applicant's remarks, Applicant argues that Linkola and/or Foster make no mention of acting responsive to the user equipment not currently being reachable in the network.

In response, Foster does indeed teach wherein responsive to the user equipment not currently being reachable in the network (column 8, lines 25-27, see "*the system does not know or care where an individual terminal may be located until it receives a call for that terminal*" and column 8, lines 28-44, see "*Each base station simultaneously attempts to locate the called terminal*" and "*the base station transmits a found message*" and column 10, lines 15-17, see "*all base station have failed to locate the called handset*" and they read on Applicant's "not currently being reachable". In this case, the word "*reachable*" means to succeed in getting in contact with or communicating with. See DICTIONARY.COM for the definition of the word "*reachable*"), and the combination of Linkola and Foster does indeed teach Applicant's

claimed invention. In addition, applicant's attention is directed to the teaching of Linkola and Foster in the claims below.

On page 10 of Applicant's remarks, Applicant further argues that Linkola and/or Foster does not teach the claimed limitations in claims 18 and 29.

In response, Linkola teaches a method in a communication system for providing a location service with geographical location information associated with a user equipment capable of communicating with the communication system (see Abstract), the method comprising the steps of: storing connection information identifying a connection of the user equipment in the communication system (see column 9, lines 63-66 and column 11, lines 36-52), and determining whether the user equipment is currently reachable in the network (see Abstract and column 5, line 50 to column 6, line 51), and wherein the connection information includes a service area identity or a cell global identity (see Abstract and column 1, lines 15-37, column 9, lines 63-67, column 8, lines 45-53), the method further including the step of translating the connection information into geographical coordinates (see Abstract and column 1, lines 15-37, column 9, lines 63-67, column 8, lines 45-53), *and Foster teaches wherein responsive to the user equipment not currently being reachable in the network (column 8, lines 25-27, see "the system does not know or care where an individual terminal may be located until it receives a call for that terminal" and column 8, lines 28-44, see "Each base station simultaneously attempts to locate the called terminal" and "the base station transmits a "found" message" and column 10, lines 15-17, see "all base station have failed to locate the called handset" and they read on Applicant's "not currently being*

reachable". In this case, the word "reachable" means to succeed in getting in contact with or communicating with. See DICTIONARY.COM for the definition of the word "reachable"), the location of the user equipment is determined in dependence on the last stored connection information for the user equipment (see column 7, lines 34-53 and column 8, lines 28-44). Therefore, the combination of Linkola and Foster does indeed teach Applicant's claims 18 and 29. In addition, applicant's attention is directed to the teaching of Linkola and Foster in the claims 18 and 29.

On page 11 of Applicant's remarks, Applicant further argues that no motivation to combine Linkola and Foster.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation to do so found in the knowledge generally available to one of ordinary skill in the art in order to track and locate the terminals using a common database.

On pages 12 and 13 of Applicant's remarks, Applicant argues that Linkola, Foster and Amirqoo fail to the limitations as recited in claims 19, 20, 30 and 31.

In response, the combination of Linkola, Foster, Darnell and Amirjoo does indeed teach Applicant's claims 19, 20, 30 and 31. In addition, applicant's attention is

directed to the teaching of Linkola, Foster, Darnell and Amirijoo in claims 19, 20, 30 and 31 below.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 18, 21, 26-29 and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Linkola et al (US 6,708,033) in view of Foster et al (US 5,918,181) and further in view of Darnell et al (US 5,043,736).

Regarding claims 18 and 29, Linkola teaches a method in a communication system for providing a location service with geographical location information associated with a user equipment capable of communicating with the communication

Art Unit: 2617

system (see Abstract), the method comprising the steps of: storing connection information identifying a connection of the user equipment in the communication system (see column 9, lines 63-66 and column 11, lines 36-52), and determining whether the user equipment is currently reachable in the network (see Abstract and column 5, line 50 to column 6, line 51), and wherein the connection information includes a service area identity or a cell global identity (see Abstract and column 1, lines 15-37, column 9, lines 63-67, column 8, lines 45-53).

Linkola does not specifically disclose wherein responsive to the user equipment not currently being reachable in the network, the location of the user equipment is determined in dependence on the stored connection information for the user equipment, the location of the user equipment is determined in dependence on the last stored connection information for the user equipment.

Foster teaches wherein responsive to the user equipment not currently being reachable in the network (column 8, lines 25-27, see “the system does not know or care where an individual terminal may be located until it receives a call for that terminal” and column 8, lines 28-44, see “Each base station simultaneously attempts to locate the called terminal” and “the base station transmits a “found” message” and column 10, lines 15-17, see “all base station have failed to locate the called handset” and they read on Applicant’s “not currently being reachable”. In this case, the word “reachable” means to succeed in getting in contact with or communicating with. See DICTIONARY.COM for the definition of the word “reachable”), the location of the user equipment is

determined in dependence on the last stored connection information for the user equipment (see column 7, lines 34-53 and column 8, lines 28-44).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Foster into the system of Linkola in order to track and locate the terminals using a common database.

The combination of Linkola and Forter does not specifically disclose the step of translating the connection information into geographical coordinates.

Darnell teaches the step of translating the connection information into geographical coordinates (see column 3 lines 68 to column 4, line 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Darnell into the system of Linkola and Foster in order provide a system for ascertaining the latitude and longitude of an individual or object at a remote location (see Darnell, column 1, lines 6-10).

Regarding claim 21, Linkola further teaches the connection information is stored in a control element of the communication system (see column 11, lines 46-52).

Regarding claim 26, Linkola further teaches the step of translating the connection information into geographical coordinates is carried out by a location service (see Abstract and column 1, lines 15-37, column 9, lines 63-67, column 8, lines 45-53).

Regarding claims 27 and 33, Linkola further teaches the communication system comprises a cellular telecommunications network (see fig.1).

Regarding claims 28 and 34, Linkola further teaches the user equipment comprises a mobile station (fig.1, see "MS").



Regarding claim 32, Linkola further teaches wherein network element is one or all of a radio network controller, a mobile switching center of the communication system, a serving GPRS support node of the communication system, or a serving mobile location center of the communication system (fig.1, see "BSC" or "MSC").

5. Claims 22, 23, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Linkola et al (US 6,708,033) in view of Foster et al (US 5,918,181) and further in view of Darnell et al (US 5,043,736) and Official notice.

Regarding claims 22, 23, 24 and 25, the combination of Linkola, Foster and Darnell teaches the connection information is stored in a control element of the communication system (see Linkola, column 11, lines 46-52), instead of the connection information is stored in a radio network controller of the communication system *or* in a mobile switching center of the communication system *or* in a serving GPRS support node of the communication system *or* in a serving mobile location center of the communication system as claimed. However, storing the connection information in a radio network controller of the communication system *or* in a mobile switching center of the communication system *or* in a serving GPRS support node of the communication system *or* in a serving mobile location center of the communication system are known in the art.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above teaching of Linkola, Foster and Darnell for provide a method as claimed, for storing the connection information.

6. Claims 19, 20, 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Linkola et al (US 6,708,033) in view of Foster et al (US 5,918,181) and further in view of Darnell et al (US 5,043,736) and Amirijoo et al (US 6,603,976).

Regarding claims 19, 30 and 31, the combination of Linkola, Foster and Darnell teaches claim 18. The combination of Linkola, Foster and Darnell does not specifically disclose the location service is provided by a gateway mobile location center.

Amirijoo teaches the location service is provided by a gateway mobile location center (see column 5, lines 32-46).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Amirijoo into the system of Linkola, Foster and Darnell in order to provide a method and system of delivering time of arrival positioning data to one externally operated and maintained requesting agent (see Amirijoo, column 1, lines 7-11).

Regarding claim 20, the combination of Linkola, Foster and Darnell teaches claim 18. The combination of Linkola, Foster and Darnell does not specifically disclose the gateway mobile location center is adapted to communicate with a gateway mobile location center of a further communication system.

Amirijoo teaches the gateway mobile location center is adapted to communicate with a gateway mobile location center of a further communication system (see fig.2b, connection between 14a and 14b).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Amirijoo into the system of Linkola, Foster and Darnell in order to provide a method and system of delivering time of arrival positioning data to one externally operated and maintained requesting agent (see Amirijoo, column 1, lines 7-11).

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi H. Ly whose telephone number is (571) 272-7911. The examiner can normally be reached on 8:30 am-5:30 pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on (571) 272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nghi H. Ly



**CHARLES APPIAH**  
**PRIMARY EXAMINER**